

### **REMARKS**

Claims 1-3, 5-7 and 9-32 are pending. Claims 1, 2, 5 and 6 have been amended to cancel sub-parts referring to fragments comprising amino acids 235-459, 460-544, 545-598, 841-894, 895-934, 536-613 and 549-563 of SEQ ID NO:2 and to recite "wherein said polypeptide has METH1 or METH2 activity". Support for the amendments to the claims can be found in the specification, for example, at page 96, first paragraph, page 117 and in Example 4. Thus, no new matter has been added.

### **Rejections under 35 U.S.C. §112, first paragraph**

#### **Deposit Requirements**

Claims 1-3, 5-7, 13, 14, 25 and 26 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement because the claims rely in part on the amino acid sequence encoded by the cDNA clone contained in ATCC 209581 and 209582 without sufficient assurance that all required deposits have been made and all the conditions of 37 CFR 1.801-809 have been met. Applicants respectfully submit that the following assurances regarding the availability of the deposit obviates this rejection and request that the rejection be reconsidered and withdrawn.

#### **Availability of the Deposit**

Human Genome Sciences, Inc., the assignee of the present application, has deposited biological material under the terms of the Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the Purposes of Patent Procedure with the following International Depository Authority: American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209 (present address). The deposits were made on January 15, 1998, accepted by the ATCC, and given ATCC Accession Numbers 209581 and 209582. In accordance with M.P.E.P. § 2410.01 and 37 C.F.R. § 1.808, assurance is hereby given that all restrictions on the availability to the public of ATCC Accession Numbers 209581 and 209582 will be irrevocably removed upon the grant of a patent based on the instant application, except as permitted under 37 C.F.R. § 1.808(b). A copy of the ATCC Deposit Receipt for Accession Numbers 209581 and 209582 is enclosed herewith as Exhibit A.

Written Description

Claims 1-3, 5-7, 15-20 and 27-32 have been rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Specifically, the Examiner alleges that the claimed genus of polypeptides is highly variant because the claims do not limit the polypeptides by functional attributes. Applicants respectfully submit that the amendments to the claims, in which the functional language "wherein said polypeptide has METH1 or METH2 activity" has been added obviates this rejection. Applicants therefore request reconsideration and withdrawal of this rejection.

Rejections under 35 U.S.C. §103(a)

Claims 1 and 5 were rejected under 35 U.S.C. §103(a) as unpatentable over Klonowski et al (US 6,649,377) in view of Kiyosuke et al (EP 742012 A2) or Fong et al (WO 99/14234). Claims 1 and 5 have been amended to cancel sub-parts referring to fragments comprising amino acids 235-459, 460-544, 545-598, 841-894, 895-934, 536-613 and 549-563 of SEQ ID NO:2. Applicants respectfully submit that the amendments to the claims overcome this rejection.

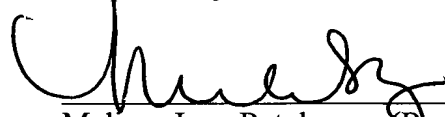
In making the amendment above, Applicants have assumed that the Examiner inadvertently referred to SEQ ID NO:4 at page 5 of the Office Action (Paper No. 20050321) and meant to refer to SEQ ID NO:2. As can be seen in the attached alignments, the amino acid sequence provided in Figure 1 of US 6,649,377 is 99.7% identical to amino acids 2-950 of SEQ ID NO:2 whereas it is only 50.5% identical to amino acids 20-882 of SEQ ID NO:4. If this is not the case, Applicants respectfully request clarification of the rejection.

**CONCLUSION**

Applicants respectfully request that the remarks of the present response be entered and made of record in the present application. If any additional information is needed, Applicants respectfully request that the Examiner contact the undersigned to facilitate prosecution. The application is believed to be in condition for allowance and early notice to that effect is earnestly solicited. If a fee is required in connection with this paper, please charge Deposit Account No. 08-3425 for the appropriate amount.

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Respectfully submitted,



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